

SINWARE
Box B032
Santa Fe, NM 87504
Aug. 17, 1984

BUGBUSTERS #999 re HOT Z-2068 update

I am sorry to report that the old reliable scroll bug is back in versions 1.6 and 1.7. It materialized when I installed the assembly-edit mode into the single step.

For version 1.6, change the value at C17F to E7 and write LD B,16 at CFE5. Until you do this the SKRL command in READ is a crash.

For version 1.7, change 6D7F to E7 and write LD B,16 at 7BE5.

For my own purposes and future issues of HOT Z, I am moving the page flip from the ENTER key to the SPACE bar. If you want to do this, change the second instruction of DSCO to CP 20 (at DEE0 in v. 1.6)

I am contemplating writing a 40 (or 42) column display driver that will be nicely legible on a TV or composite monitor. It should run with any language that prints through RST 10 as BASIC does and it should be relatively cheap. If that works out, I will follow with a 80 (+) column version that will probably require an RGB monitor, as, I believe, the 64 column adapters do. I will probably make a few minor changes, such as getting rid of the "Scroll?" trap in favor of a Microsoft-like scroll-to-the-end-of-it routine. If any of you have any other suggestions about the display, write to me soon.

I have an article coming out in the next Syncware News, which will be published by Tom Woods. The article is a simple approach to using 2068 BASIC functions from machine code. The second should have a bit more meat and show you how to use the floating point system.

Best,

A handwritten signature, likely "Ray", consisting of a stylized capital 'R' followed by a lowercase 'ay'.

SINWARE
Box 8032
Santa Fe, NM 87504
Oct. 10, 1984

HOT Z NEWS

One fairly significant bug has surfaced, fortunately with easy space for repair. The clear-screen command when using the single-step window (in versions 1.6x and 1.7x *only*) causes a crash. The fix goes at 9996 in version 1.6 and at ED96 in version 1.7. There are many ways to approach it, but the following is simple enough. Write it over the code that is currently there.

```
LD HL,4000
LD DE,4001
LD BC,17FF
LD (HL),00
LDIR
LD HL,1821
LD (spsn),HL
RET
```

I want to announce a cartridge version of HOT Z-2068. By no means do I intend to make a career of this program, but the cartridge does seem to open up one of the most powerful aspects of the 2068, its ability to deal with banked memory. I've called this new version HOT Z-AROS, which adds bank management to its repertory and gives you an interactive link to hardware that hasn't been developed yet. And to all of what you already own. There are in fact three 64K banks there, if you care to use a can opener to get at them. HOT Z provides most of the muscle, lets you move from bank to bank, read, write, disassemble, single-step anywhere. We still need a bus expansion unit, but someone will provide.

What it is:

- o Self starting on power up
- o Invisible (at your choice)
- o Takes about 256 bytes of RAM (protected)
- o Disassembles any chunk of any memory bank
- o Writes and applies all commands to any RAM bank
- o Leaves both display files clear with RAM-res code and stack in high memory

Creating this version has been greatly slowed by the unfinished nature of the Timex software. HOT Z corrects as many of the errors from the EXROM as have come to hand, but it would be much handier to have the corrections inside the machine. In consequence, I have decided also to offer an EPROM for inside your 2068 that corrects many of the errors it

was born with. In addition to the published corrections, there are corrections to those corrections, corrections without which many functions will fail when the double display file is used, corrections that improve the function dispatcher, and some more. HOT Z will make these corrections as part of its startup, so you won't need them for that, but if you want the machine to stand on its own code, then you ought to do something. You may want to use the cartridge version first to decide whether you really need a corrected EXROM.

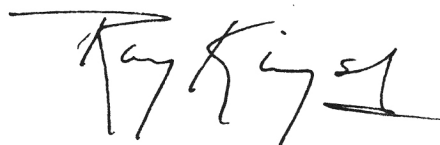
The annotation tape is available with a full set of notes for \$15. It still appears to be the best source of information on the 2068 and a great supplement to HOT Z. The annotation/update offer to owners of versions lower than 1.6 is discontinued. (Too many tapes and papers to juggle.)

The following offer is to you owners only and is good until the end of the year. (Someone recently wrote and demanded the FINAL version of HOT Z-2068. While that seems to me somewhat like the final solution, I can understand that many of you might feel the same. I am trying to keep your incremental costs down to something approaching what you might pay for that final version, whenever. The truth is the programming effort for the bank-switching version was at least as great as bringing HOT Z-II over from the ZX.)

- * A tape that you can burn to EPROM and mount on one of the Oliger cartridge boards or any other is \$12 ppd. The code will only run from EPROM, so don't get it if you can't burn them.
- * Two 2764's, burned and tested, are \$27 ppd. You will need a cartridge board to mount them on. I suggest John Oliger's, which are \$15.95 in kit form. (11601 Whidbey Dr, Cumberland, IN 46229). Our delivery will be about two weeks.
- * The above 2764's, in an assembled Oliger board are \$48 ppd. Delivery is subject to availability of the boards, which I believe are in high demand. You can probably get them more cheaply and quickly from John himself.
- * One 2764, burned with corrected EXROM code, with a copy of mounting instructions from the 2068 technical manual, is \$16 ppd. Available about Oct. 25. (A cut and two jumpers are required.)

More later, and I hope more software.

Best,

A handwritten signature in black ink, appearing to read "Ray King". The signature is stylized with a long horizontal line extending from the "y" and a large, looped "K".

ANNOTATED NAME LIST AVAILABLE SOON: HOT Z-2068 PLUS 2068 ROM

We have nearly completed our HOT Z annotation of the 2068 ROM routines. That means the the entire NAME file, ROM plus HOT Z, should be typed up and ready around the first of August. We are also enlarging the file as we go along, so there will be 1200 or more NAMES on the list. The explanations are short and to the point; they do not tell you what happens line by line, but they do give you an idea what each block of code accomplishes. I will include some notes to point out how to use some of the most useful ROM calls.

The package will consist of a tape and at least 30 pages of notes and listing. The tape will include an updated version or versions of HOT Z-2068, with the various known bugs repaired and probably an added feature or two. Naturally, it will only be available on these terms to current owners of the main program. I have had to base the price on the potential market size, which is now small and elite. \$17, shipping included.

The default listing will be alphabetical by routine NAME. If you prefer a numerically ordered list by address, then say so with your order and we will substitute. (No exchanges.) Any information gluttons among you may include an extra \$3 to cover the extra printing and postage for both alphabetical and numerically ordered lists.

A few NAMES for the RAM-resident code will be included, and I will do what I can to help you understand what is in the EXROM, though it isn't possible with HOT Z to list the EXROM in its "home" address space (because HOT Z uses so many ROM calls). Most of the EXROM is cassette routines, the origin of the RAM-resident code, and a jump table for the function dispatcher. There is also nearly 1-3/4 K of unused ROM there.